We claim:

1 2. An isolated polynucleotide comprising a polynucleotide chosen from:

a) a polynucleotide encoding a polypeptide having at least 95% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

b) a polynucleotide encoding a polypeptide having at least 98% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

c) a polynucleotide encoding a polypeptide having at least 99% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

d) a polynucleotide encoding a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

f) a polynucleotide encoding an epitope bearing portion of a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

g) a polynucleotide comprising SEQ ID No : 1, 3, 5, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43 or fragments or analogs thereof;

h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g).

2. An isolated polynucleotide comprising a polynucleotide chosen from:
   a) a polynucleotide encoding a polypeptide having at least 95% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   b) a polynucleotide encoding a polypeptide having at least 98% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   c) a polynucleotide encoding a polypeptide having at least 99% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   d) a polynucleotide encoding a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   f) a polynucleotide encoding an epitope bearing portion of a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
   g) a polynucleotide comprising SEQ ID No : 1, 3, 5, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41 or 43;
   h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g).

3. An isolated polynucleotide consisting essentially of a polynucleotide chosen from:
   a) a polynucleotide encoding a polypeptide having at least 95% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;
   b) a polynucleotide encoding a polypeptide having at least 98% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30,

32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

c) a polynucleotide encoding a polypeptide having at least 99% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

d) a polynucleotide encoding a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

f) a polynucleotide encoding an epitope bearing portion of a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

g) a polynucleotide having SEQ ID No : 1, 3, 5, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43 or fragments or analogs thereof;

h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g)

wherein said polynucleotide encodes a polypeptide that is immunogenic.

4. An isolated polynucleotide consisting essentially of a polynucleotide chosen from:

a) a polynucleotide encoding a polypeptide having at least 95% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

b) a polynucleotide encoding a polypeptide having at least 98% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

c) a polynucleotide encoding a polypeptide having at least 99% identity to SEQ ID No :

d) a polynucleotide encoding a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

f) a polynucleotide encoding an epitope bearing portion of a polypeptide having SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

g) a polynucleotide having SEQ ID No : 1, 3, 5, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41 or 43 ;

h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g)

wherein said polynucleotide encodes a polypeptide that is immunogenic.

5. An isolated polynucleotide comprising a sequence that hybridizes under stringent conditions to either

a) a DNA sequence encoding a polypeptide or

b) the complement of a DNA sequence encoding a polypeptide;

wherein said polypeptide comprises SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.

6. The polynucleotide of claim 1 that hybridizes under stringent conditions to either

a) a DNA sequence encoding a polypeptide or

b) the complement of a DNA sequence encoding a polypeptide,

wherein said polypeptide comprises SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.

7. The polynucleotide of claim 2 that hybridizes under stringent conditions to either
   a) a DNA sequence encoding a polypeptide or
   b) the complement of a DNA sequence encoding a polypeptide, wherein said polypeptide comprises SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44.

8. The polynucleotide of claim 3 that hybridizes under stringent conditions to either
   a) a DNA sequence encoding a polypeptide or
   b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide has SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.

9. The polynucleotide of claim 4 that hybridizes under stringent conditions to either
   a) a DNA sequence encoding a polypeptide or
   b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide has SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44.

10. The polynucleotide of claim 1 that hybridizes under stringent conditions to either
   a) a DNA sequence encoding a polypeptide or
   b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide comprises at least 10 contiguous amino acid residues from a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.

11. The polynucleotide of claim 2 that hybridizes under stringent conditions to either

a) a DNA sequence encoding a polypeptide or

b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide comprises at least 10 contiguous amino acid residues from a polypeptide SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44.

12. The polynucleotide of claim 3 that hybridizes under stringent conditions to either

a) a DNA sequence encoding a polypeptide or

b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide has at least 10 contiguous amino acid residues from a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.

13. The polynucleotide of claim 4 that hybridizes under stringent conditions to either

a) a DNA sequence encoding a polypeptide or

b) the complement of a DNA sequence encoding a polypeptide; wherein said polypeptide has at least 10 contiguous amino acid residues from a polypeptide SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44.

14. A vector comprising the polynucleotide of anyone of claims 1 to 13 , wherein said DNA is operably linked to an expression control region.

15. A host cell transfected with the vector of claim 14.

16. A process for producing a polypeptide comprising culturing a host cell according to claim 15 under conditions suitable for expression of said polypeptide.

17. An isolated polypeptide comprising a polypeptide chosen from:

a) a polypeptide having at least 95% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

b) a polypeptide having at least 98% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

c) a polypeptide having at least 99% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

d) a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

e) a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

f) an epitope bearing portion of a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

g) the polypeptide of (a), (b), (c), (d), (e) or (f) wherein the N-terminal Met residue is deleted;

h) the polypeptide of (a), (b), (c), (d), (e), or (f) wherein the secretory amino acid sequence is deleted.

18. An isolated polypeptide comprising a polypeptide chosen from:

a) a polypeptide having at least 95% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

b) a polypeptide having at least 98% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

c) a polypeptide having at least 99% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

d) a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

e) a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

f) an epitope bearing portion of a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

g) the polypeptide of (a), (b), (c), (d), (e) or (f) wherein the N-terminal Met residue is deleted;

h) the polypeptide of (a), (b), (c), (d), (e), or (f) wherein the secretory amino acid sequence is deleted.

19. An isolated polypeptide consisting essentially of a polypeptide chosen from:

a) a polypeptide having at least 95% identity to an amino acid sequence having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

b) a polypeptide having at least 98% identity to an amino acid sequence having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

c) a polypeptide having at least 99% identity to an amino acid sequence having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

d) a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

e) a polypeptide capable of raising antibodies having binding specificity for a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

f) an epitope bearing portion of a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof;

g) the polypeptide of (a), (b), (c), (d), (e) or (f) wherein the N-terminal Met residue is deleted;

h) the polypeptide of (a), (b), (c), (d), (e), or (f) wherein the secretory amino acid sequence is deleted

wherein said polypeptide is immunogenic.

20. An isolated polypeptide consisting essentially of a polypeptide chosen from:

a) a polypeptide having at least 95% identity to an amino acid sequence having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

b) a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

c) a polypeptide capable of raising antibodies having binding specificity for a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

d) an epitope bearing portion of a polypeptide having SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;

e) the polypeptide of (a), (b), (c), (d), (e) or (f) wherein the N-terminal Met residue is deleted;

f) the polypeptide of (a), (b), (c), (d), (e), or (f) wherein the secretory amino acid sequence is deleted

wherein said polypeptide is immunogenic.

21. A chimeric polypeptide comprising two or more polypeptides comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof; provided that the polypeptides are linked as to form a chimeric polypeptide.

22. A chimeric polypeptide comprising two or more polypeptides comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44 provided that the polypeptides are linked as to form a chimeric polypeptide.

23. A pharmaceutical composition comprising a polypeptide according to any one of claims 17 to 20 and a pharmaceutically acceptable carrier, diluent or adjuvant.

24. A pharmaceutical composition comprising a polypeptide according to any one of claims 21 to 22 and a pharmaceutically acceptable carrier, diluent or adjuvant.

25. A method for prophylactic or therapeutic treatment of S. pyogenes infection in a host susceptible to S. pyogenes infection comprising administering to said host a prophylactic or therapeutic amount of a composition according to claim 23.

26. A method according to claim 23 wherein the host is a neonate, an infant or a child.

27. A method according to claim 23 wherein the host is an immunocompromised host.

28. A method according to claim 23 wherein the host is an adult.

29. A method according to claim 23 wherein the host is an elderly.

30. A method for prophylactic or therapeutic treatment of S. pyogenes infection in a host susceptible to S. pyogenes infection comprising administering to said host a prophylactic or therapeutic amount of a composition according to claim 24.

31. A method for prophylactic or therapeutic treatment of infections, including pharyngitis, erysipelas, impetigo, scarlet fever, and invasive diseases such as bacteremia and necrotizing fasciitis comprising administering to said host a therapeutic or prophylactic amount of a composition according to claim 23.

32. A method for diagnosis of S. pyogenes infection in an host susceptible to S. pyogenes infection comprising
    a) obtaining a biological sample from a host;
    b) incubating an antibody or fragment thereof reactive with a polypeptide according to any one of claims 17 to 20 with the biological sample to form a mixture; and
    c) detecting specifically bound antibody or bound fragment in the mixture which indicates the presence of S. pyogenes.

33. A method for the detection of antibody specific to a S. pyogenes antigen in a biological sample containing or suspected of containing said antibody comprising
    a) obtaining a biological sample from a host;
    b) incubating one or more polypeptides according to any one of claims 17 to 20 or fragments thereof with the biological sample to form a mixture; and

c) detecting specifically bound antigen or bound fragment in the mixture which indicates the presence of antibody specific to S. pyogenes.

34. Use of the pharmaceutical composition according to claim 23 in the manufacture of a medicament for the prophylactic or therapeutic treatment of S. pyogenes infection.

35. Use of the pharmaceutical composition according to claim 24 in the manufacture of a medicament for the prophylactic or therapeutic treatment of S. pyogenes infection.

36. Kit comprising a polypeptide according to any one of claims 17 to 20 for detection or diagnosis of S. pyogenes infection.

37. Kit comprising a polypeptide according to any one of claims 21 to 22 for detection or diagnosis of S. pyogenes infection.